

Figure 1: Shows the Stand Alone Configuration of the iQueVision: Animated / Vision Testing System, the design to use with computer / Unix based computer server via remote control with a touch screen (kiosk), PDA and or Keyboard with a Hi-resolution monitor or TV screen in a clinic.

Note: Figure 1 - Using the iQue-A/VTs a “Stand-Alone” Product a Doctor using a Unix based computer would access the files using the kiosk system. Choosing either icon, Vision Testing or Patient Records, the doctor would be able to call up any number of visual aids, reference material or patient records to help in the examination process. This system also lends itself to be used with a Keyboard/Mouse, Palm Pilot, Mouse Pointer, portable laptop or tablet pc with a hard wired or wireless connection to a Hi-Rez display screen in the same exam room.

Figure 2: Shows Multiple Operating Systems on a Unix Server iQueVision: Animated / Vision Testing System with a computer / touch screen (kiosk), PDA and or Keyboard with an internet connection and Hi-resolution monitor or TV screen. This is also the cross-platform configuration showing the Macintosh/Unix, Windows and Linux platforms.

Note: Figure 2 - Using the iQue-A/VTs does not lock the user into one computer system. Using a Unix based server the same files can be access with either Windows, Macintosh or RedHat Linux. The end user now has a choice of personal taste or customization. This means that any of these computer systems, Macintosh, Windows or RedHat Linux with the right specification, can now access the same files at the same time all on the same network. Choosing either icon on the main menu, Visual Records or Patient Records, the doctor would be able to call up any number of visual aids, reference material or patient records to help in the examination process. This system also lends itself to be used with a Keyboard/Mouse, Palm Pilot, Mouse Pointer or portable laptop with a hard wired connection or a wireless connection to a Hi-Rez display screen in the same exam room.

Figure 3. Shows the Multiple OS with the total number of uses and host files that can be accessed using the iQueVision: Animated / Vision Testing System with a portable laptop 17" com-

puter and or Hi-resolution monitor or TV screen with wireless or hard-line internet connection.

Note: Figure 3 - One of the main features of the iQue-A/VTs are the total number of computers that can be linked to the same Unix Server system. This system give access to 250 workstations while hosting 125 database files. This expendability with multiple operating systems clearly sets it apart from other Medical Database system. Choosing either icon on the main menu, Vision Testing or Patient Records, the doctor would be able to call up any number of visual aids, reference material or patient records to help in the examination process. This system also lends itself to be used with a Keyboard/Mouse, Palm Pilot, Mouse Pointer or portable laptop with a hard wired or wireless connection to a Hi-Rez display screen in the same exam room.

Figure 4. Shows the Portable or Wireless Connections to a Unix Server iQueVision: Animated / Vision Testing System on both touch screen computers and monitors.

Note: Figure 4 - Another unique feature that sets the iQue-A/VTs apart is the portable connection a doctor can have to the server. This configuration includes a Laptop, Palm Pilot, and PC Tablet. The wireless connection is not limited to just the portable architecture. It can also be used with any other computer system configured with either 802.11b or 802.11g wireless cards. Choosing either icon on the main menu, Vision Testing or Patient Records, the doctor would be able to call up any number of visual aids, reference material or patient records to help in the examination process. The screen on the laptop show what a doctor would see with trying to locate a patients file using the alphabetical listings. This system also lends itself to be used with a Keyboard/Mouse, Palm Pilot, Mouse Pointer with a hard wired or wireless connection to a Hi-Rez display screen in the same exam room.

Figure 5. Shows the iQueVision: Animated / Vision Testing System with home therapy application for vision care with a computer connection via the internet on different browsers.

Note: Figure 5 - Another unique feature that sets the iQue-A/VTs apart is the new internet Home Therapy System. Using this configuration and any one of the standard web based browser technologies, a doctor if needed could have a patient log on and perform a list of daily, weekly, or monthly therapy sessions via the instructions that were posted. Having done the prescribe therapy

sessions the doctor could monitor the results with a report that could be access to show what the patient had accomplished by logging on. It could be something as simple as eye movement exercises with a variety of tests. After each test the system would automatically log what tests had been done, how long it took and when. It could also be something in the way of instructions on muscle moment therapy or anything the doctor felt the patient required for a better recovery.

Figure 6. Show the subcategories listed for different configurations and uses, but is not limited to these specific fields of vision care.

Notes: Figure 6 - Services offered on the Server:

- Server Maintenance (Contract Basis)
- Up Grades to system software
- Ordering and Downloading Test
- Information on new tests
- Electronic Patient Records
- Patient Photos and progress images
- Data Base Storage & Backup
- Home Therapy access
- Patient Education on products
- Doctors Reference Materials
- HIPAA Compliant

Figure 7. Shows the iQueVision: Animated / Vision Testing System functionality and menu control. Along with a list of categories that can be added to the system as it's being developed.

Note: Figure 7 - The applications can be customized for areas of interest that include, but are not limited to: All of the tests would be either animated or slide form in such a way as to provide a more educational, entertaining and comprehensive test than could ever be achieved with any other medium. New testing applications can be customized for areas of interest that include, but are not limited to: pediatric vision testing, general vision testing (adult and child), low vision testing (adult and child), sports vision testing (adult and child), acuity screening (adult and child)

and home therapy (adult and child). Specialized testing will include: stereo testing / color testing / hue testing - D15 / neutral density testing / variable & non variable VetroGrams / depth perception with 3D stereo testing / visual game testing via computer and HTML/XML and any other visual testing system that can be animated in design and implemented onto the iQueVision: Animated - Vision Testing System. With the iQueVision: Animated - Vision Testing System, any doctor that purchases this system can administer a number of technically accurate and animated vision tests at the push of a remote control touch screen (kiosk), Keyboard/mouse or PDA button.

Figure A. Shows the Measurement Formula for 20/20 Vision as it has been used over the past 60 years in the development of projection systems. However, it also shows the new Digital Acuity Vision Testing Formula (DAVTF) that was discovered during the building of the iQueVision: Animated / Vision Testing System.

Figures B1, B2, B3, show the three top competitors in this field and the projection systems they currently sell,

Figure C. Show a sample image of the what the current projection system (on the left) are providing as compared to the quality of the same size letter (E @ 20/20) the new iQueVision Test (on the right) can produce.

Figure D. In the course of study general "Observations" came to light with regard to Bulb life, Room Lighting, and the Slides used in testing. I have also included an image of the first slide projector patented in 1922,

Figure E. Shows the iQueVision A/VTs cross - platform configurations showing the same vision testing system can be accessed by all three operating systems.

Figure F. Shows the number of Optional Tools available to the doctor in order to use the same iQueVision A/VTs.

Figure G. Not only does the doctor has a choice of tools but also the choice of options that can be added as needed or upgraded to the iQueVision Testing System.

Figure H. Shows the "Backdoor" terminal connection iQueVision would have in servicing and maintaining each unix server sold to a clinic. Using a command line system an tech can liter-

ally access the system, fix the problem and restart the system via a simple internet connection.

Figure I₁, I₂, I₃. The next three sections show the choices that are available to the doctors who purchase this system. I₁ - Basic Menus, I₂ - Clinical Menus and I₃ - Custom Menus. This is also unique to iQueVision Testing System as it leads the way in personalization for each and every doctor or clinic.

Figure J, A custom button can also be added to the menu system for each doctor. Each doctor has his or her own operating method. Using the custom button organizes the test in the pre programmed order in which the doctor would like to use them. This is a time saving functions as all the entire testing process flows from one test to another without having to return to the main menu.

Figure K, Show a list of the top 15 test that can be accessed by the doctor in both Slide and Animated form. You average slide projector can only handle 30 test. The new Snellen Test alone has 81 slides which is more than double then the current test. Bring the total number of slides to over 300.

Figure L₁. L₂. L₃. L₄. L₅.

These are the collective configuration L₁, "Stand Alone" Mac/Unix. L₂, "Stand Alone" PC Configuration. L₃, "Cross Platform with Server Connection". L₄, Portable Systems" and L₅, "Server Combinations" In the "Stand Alone" configuration this show another important aspect of this system in having a choice between DVI and VGA. DVI simple put is an extension of this the same screen, where VGA, if you look carefully, is a mirrored image of the same picture on both screens. This will be come more clear with Figures M₁ and M₂.

Figure M₁. & M₂. M₁ - shows the mirrored connection or VGA connection between the active and passive monitor. Meaning that what the patient will be able to see the control panel at the bottom of the screen, even though it will be too small to read at 20ft. M₂.- of the two systems the DVI system is better as you can see the control panel only appears on the doctors portable laptop and the patients screen shows only the test that is displayed.

Figures N₁. N₂. & N₃. These represent a general idea of what the interface may look like when completed. Demos have already been made using the images from N₁. and N₂. N₃ - is the

newest addition to the menu system with a general idea of it's control function and features.

Figure O. This is where it all comes together, here you can visual see the different types of rooms currently being used by doctors today. The first two rooms show the angle of distortion from projection systems and the last room with iQueVision A/VTs direct, line of sight viewing on a bright monitor.

Note: A- Patients View vs Projection in a 20ft room: Since the late 1940's projection systems had to project an image less than one inch in size onto a silver-oxide screen some 20ft away. To help the patient see the optotypes OD's had to dim the lights - because the bulbs in the projectors were not bright enough and the contrast level was below 250:1. Another issue that soon became apparent was the projected degree of angle, which distorts an image and results in a non-symmetrical trapezoidal-shapes in the optotypes.

Note: B- Patients View vs Projection in a 10ft Mirrored room: Today, some 60 years later, nothing has really changed. This is a Projection system in a 10ft room built to simulate a 20ft room. This modified vision testing system is a great space saver. It uses two mirrors, one for the projector and one for the patient. Studying these angles on this focal plane the distortion for the optotypes would appear to be twice as bad. However, using a Halogen bulb you might reach 250:1 on the contrast level but the doctor would still have to dim the lights.

Note: C- Patients View with iQueVision Monitor Screen in a 10 or 20ft room: Then there's the iQueVision Vision Testing system. Leave the lights on and experience real world testing. Using our "Digital " 20/20 formula minimum of 400:1 contrast you can position your patient directly in front of the screen. The system works in both the 10ft or 20ft configuration and gives them a distortion free view of all the optotypes. Strange, after 60 years one of the very first tools to be used by OD's is one of the last to be retrofitted for the 21st Century

Figure P. This show Photo 1 and Photo 2. In Photo 1 you can see a slide projector in the dark trying to project an image 20ft across the room. This is a great representation of the just how dim the letters are at the opposite end of the room and just how hard it is to read them. In Photo 2 the room's lights have been turned on and yet using a large monitor screen you can easily read the letters on the test chart. This also shows how a doctor using the touch screen system would be able

to change or display any letter in any size or call up any other test needed during the examination process just by pushing the touch screen kiosk.

Example: The technical equipment could be, but is not limited to, a system such as the Apple Unix Server or Laptop, Tablet PC, PDA, a Planar 19" wide TFT LCD Flat Panel monitor, or the Actual Depth 15bx 3D LCD monitor. As long as the iQueVision A/VTs computer/ laptop / Unix server, High resolution monitor and computer system are capable of providing the right control, specific resolution and contrast ratio while meeting the minimum requirements of the "Digital Minimums," the choice of hardware equipment is entirely up to the user.